

*Department of Ocean and Resources Engineering
Seminar*

**TRANSIENT DETECTION AND LOCALIZATION
SYSTEM FOR THE PMRF UNDERWATER RANGE**

By

Nicholas Emard

MIKEL Inc.

Wednesday, September 09, 2009

MSB 114

3:00-3:30 pm Coffee Hour

3:30-4:30 pm Seminar

Please join us for the coffee hour near the seminar venue a half hour
before the seminar, 3:00 – 3:30 pm

Abstract

The presentation describes the approach and algorithms used to provide a location of a transient event using time of arrival measurements from a given set of hydrophones located on the range. The presentation will show the operation of the system along with analysis methods used to adjust the computed results. Actual range data will be used while demonstrating localization of surface transient events such as weapon impacts, subsurface imploding events, multi transient signal events such as an end of run pinger and sea floor events such as bottom mounted pingers. This work is sponsored by the state of Hawaii through the Center of Excellence for Research in Ocean Sciences (CEROS) through a cooperative agreement with the Defense Advanced Research Projects Agency.